

ABSTRACT

5 A highly reliable plated lead finishing structure
for a semiconductor part using a Pd film or a Pd alloy
film, instead of a traditional solder plating material,
as a brazing metal, without causing a problem of short-
circuits between terminals due to whiskers, is provided.
In the plated lead finishing structure of the invention,
when a plated film having a thickness of not larger than
10 0.3 μm is formed using Pd or a Pd alloy (26), instead of
a conventional solder-plating material as a brazing
metal, on the surfaces of the external connection
terminals (10, 12) of a semiconductor part using copper
or a copper alloy-based material, the film is plated
15 without interposing any underlying layer or any
intermediate metal layer between the material and the Pd-
or Pd alloy-plated layer. In some cases, Au or an Au
alloy (28) is further plated and has a thickness of not
larger than 0.1 μm on the plated film.